

Work Order ID 85377

85377

June-07-12 9:19:46 AM

Item ID: D412-698-028

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 07/06/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/07 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

DSI 9484

C

100

0.00

100

DC

Document Control

Memo

Photocopy bluefile & type labels per PPP D412-698-028/ DSI9484
CHG003

0.00

JB 5/2/07

12/06/07 MLJ 12-6-27
(2)

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

2

12/06/27 JB
81

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Quality Control

Memo

0.00

6/17/07

(40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85377***85377***

Page 2

June-07-12 9:19:46 AM

Item ID: D412-698-028

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 07/06/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-698-028/ DSI 9484								
	Location: _____								
	PPP rev: <u>B.</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

2x

~~12-6-28~~
12-7-3.

12/7/14

MF

12-07-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-07-12 9:19:52 AM

Page 1

Work Order ID: 85377

85377

Parent Item: D412-698-028

D412-698-028

Parent Item Name: Bracket Assembly, RH (Aluminum Doors)

Start Date: 07/06/2012

Required Date: 21/06/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: new issue DD 09.11.30 verified by:EC
11.03.31 AS PER ECN11-531 verified by:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3199-4		Manufactured	No			110	Each	43.0000	1	2			
D3199-4									**				
Bracket, Fwd RH													

Location

Loc Qty

Loc Code

ST236B

43

77735

43

77735

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: * _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY. -027	QTY. -028	QTY. -037	QTY. -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO #01-Q-01

APPROVED

BY: [Signature]
D. SHEPHERD (DE #02)

DATE: 11.03.21
CERT. NO.: SH92-43
ISSUE NO.: 5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE		09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED	ASS		
MFG. APPR.	N/A		
APPROVED			
DE APPR.		REV. C SHEET 1 OF 3	
TITLE		SCALE	
D412-698-027/-028/-037/-038 Kits		NTS	
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NO. 85377 MLC
12/06/07
WORK ORDER

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RETURN TO
ENGINEERING

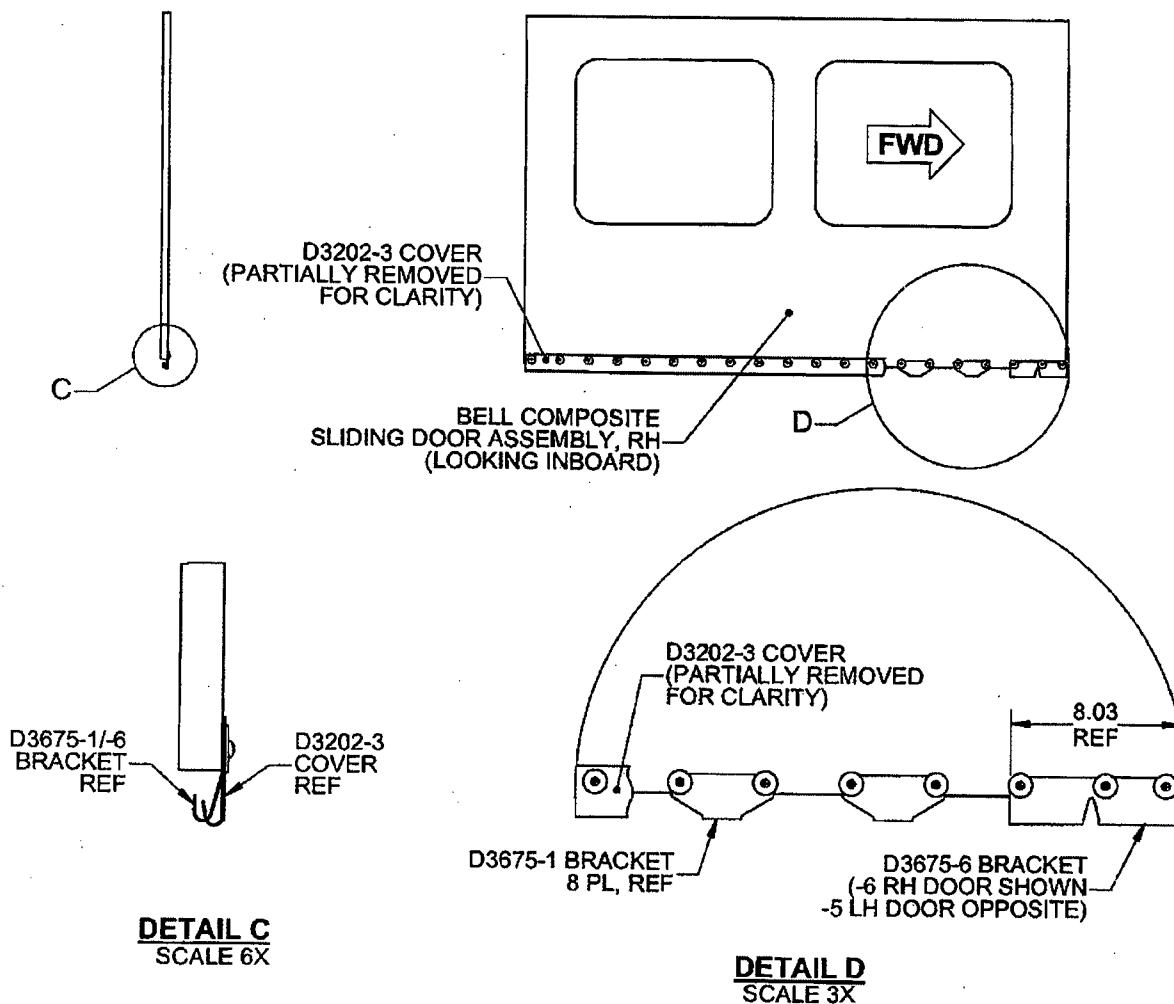






FIGURE 2: D3675-5/-6 BRACKET INSTALLATION ON COMPOSITE DOORS
(-6 SHOWN, -5 OPPOSITE)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 11.03.21
CERT. NO.: SH92-43
ISSUE NO.: 5

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9484	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		D412-698-027/-028/-037/-038 Kits	NTS
DATE	11.03.21	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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85377

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA.IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY. -027/	QTY. -028	QTY. -037	QTY. -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 11.03.21
CERT. NO.: SH92-43
ISSUE NO.: 5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	<i>[Signature]</i>	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	NA	DSI 9484	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	D412-698-027/-028/-037/-038 Kits	NTS
DATE	11.03.21	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

Work Order ID 85380

85380

Page 1

Item ID: D412-698-037

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket Assembly, LH (Composite Doors)

Start Date: 07/06/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/07 Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

DSI 9484

C

100

0.00

100

DC

Document Control

Memo

Photocopy bluefile & type labels per PPP D412-698-037/ DSI9484
CHG002

0.00

JB 5 rdo7103

12-6-27 MLJ

110

Pick Kit

0.00

110

Packaging

Packaging

Memo

0.00

12/06/27 JB

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Quality Control

Memo

0.00

5 rdo7103

(XL)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 85380

85380

Page 2

June-07-12 9:20:37 AM

Item ID: D412-698-037

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket Assembly, LH (Composite Doors)

Start Date: 07/06/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 21/06/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-698-037/ DSI 9484								
	Location: _____								
	PPP rev: <u>B</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

12-6-28
12-7-3
12/7/4
ME
12-07-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

June-07-12 9:20:40 AM

Page 1

Work Order ID: 85380

85380

Parent Item: D412-698-037

D412-698-037

Parent Item Name: Bracket Assembly, LH (Composite Doors)

Start Date: 07/06/2012

Required Date: 21/06/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 11.01.11 new issue DD verified by:EC
11.03.31 AS PER ECN11-531 verified by:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3675-5		Manufactured	No			110	Each	3.0000	1	1			

D3675-5
Sliding Door Bracket

**

fb 12/06/27

Location

Loc Qty

Loc Code

ST236A

3

69573

3

69573

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IN D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket.
Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY -027	QTY -028	QTY -037	QTY -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE





Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kG	102.3 in 2.60 m	16.37 in-lb 0.18 m-kG	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kG	102.3 in 2.60 m	16.37 in-lb 0.18 m-kG	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kG	102.3 in 2.60 m	18.41 in-lb 0.21 m-kG	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kG	102.3 in 2.60 m	18.41 in-lb 0.21 m-kG	

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO #01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 11.03.21
CERT. NO.: SH92-43
ISSUE NO.: 5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	BY	09.10.16
REV.	DESCRIPTION	DATE	
DESIGN			
DRAWN			
CHECKED	ASS		
MFG. APPR.	N/A		
APPROVED			
DE APPR.			
DATE	11.03.21		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. DSI 9484			
REV. C SHEET 1 OF 3			
TITLE D412-698-027/-028/-037/-038 Kits			
SCALE NTS			
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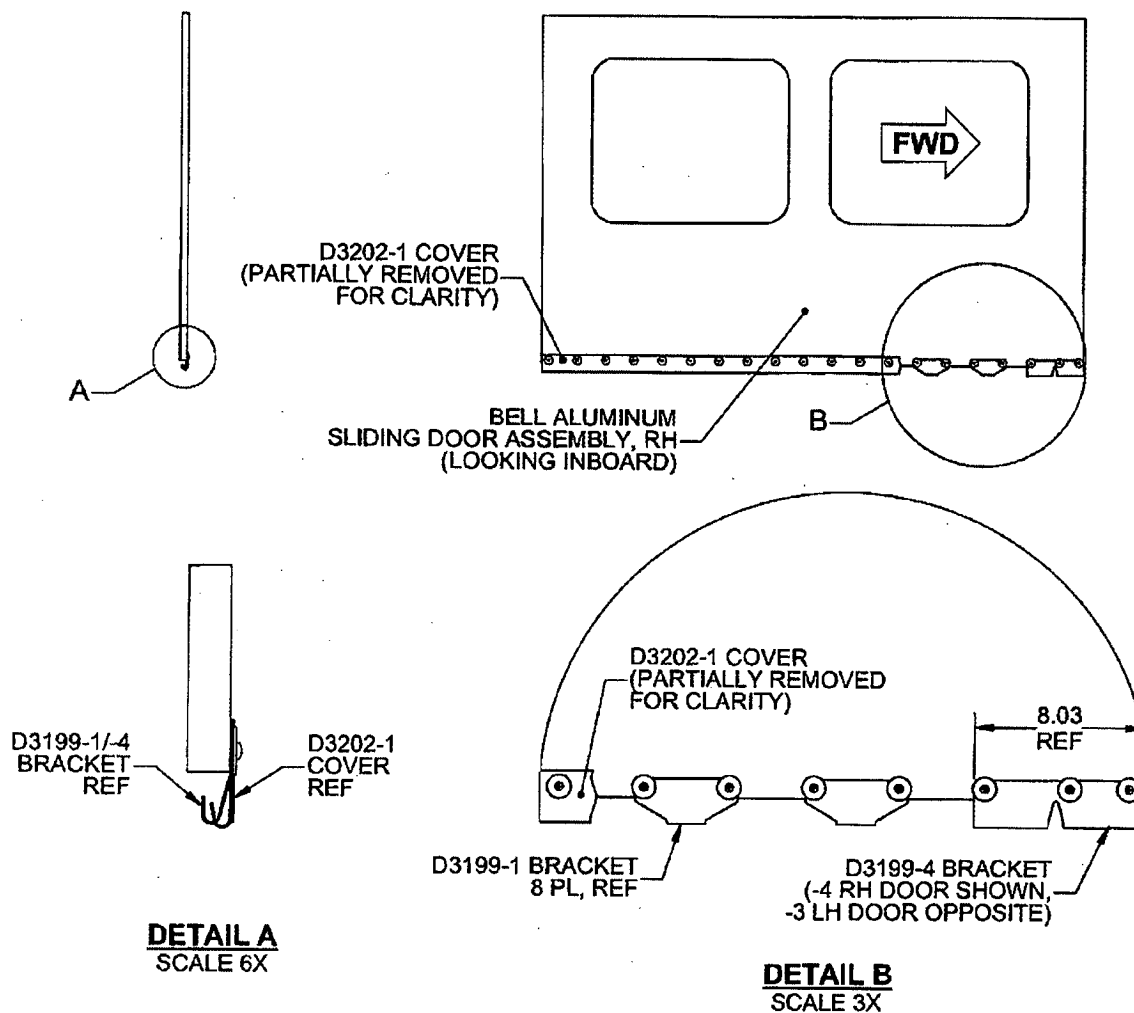






FIGURE 1: D3199-3/-4 BRACKET INSTALLATION ON ALUMINUM DOORS
(-4 SHOWN, -3 OPPOSITE)

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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 11.03.21
CERT. NO.: SH92-43
ISSUE NO.: 5

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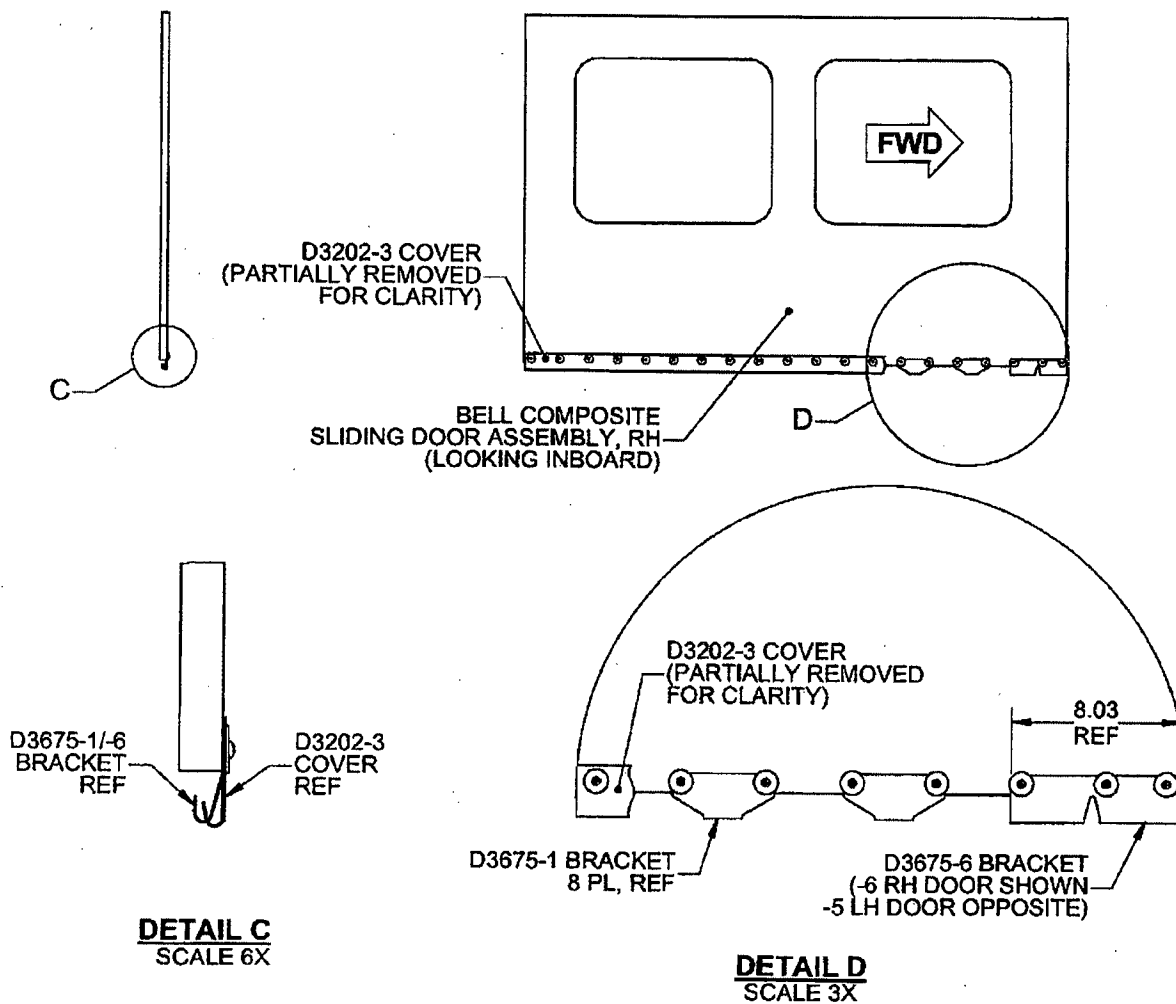






FIGURE 2: D3675-5/-6 BRACKET INSTALLATION ON COMPOSITE DOORS
(-6 SHOWN, -5 OPPOSITE)

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DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E OR LATER APPROVED REVISION
AND ICA-D412-698 REV. 5 OR LATER APPROVED REVISION

REF. TCCA STC: SH92-43
REF. FAA STC: SR01446NY
REF. EASA.IM.R.S.00709

Field experience has shown that the forward D3199-1 brackets that are part of the D412-698-011/-012/-017 Cabin Door Roller Kits and forward D3675-1 brackets that are part of the D412-698-031/-032/-033 Cabin Door Roller Kits may wear prematurely if the aircraft is flown a significant amount of time with the sliding doors open. Dart has developed the D412-698-027/-028 kits that includes a longer D3199-3/-4 bracket for installation in the first forward position of the D412-698-011/-012/-017 kits to reduce wear on these forward brackets on aircraft equipped with aluminum doors. Likewise, Dart has developed the D412-698-037/-038 kits that includes a longer D3675-5/-6 bracket for installation in the first forward position of the D412-698-031/-032/-033 kits to reduce wear on these forward brackets on aircraft equipped with composite doors.

The D412-698-027/-028/-037/-038 kits may be installed as follows:

- 1) Remove the sliding door from the aircraft per Section 52.1 of ICA-D412-698
- 2) Remove the first forward D3199-1 or D3675-1 brackets as applicable.
- 3) Install the D3199-3/-4 or D3675-5/-6 bracket as applicable in lieu of the removed -1 bracket. Refer to Figure 1 Sheet 2 (aluminum doors) or Figure 2 Sheet 3 (composite doors).
- 4) Torque hardware per ICA-D412-698.
- 5) Re-install sliding door on aircraft per Section 52.2/52.3 of ICA-D412-698 as applicable.
- 6) Make entry in technical records of aircraft indicating that DSI 9484 has been completed.

PARTS LIST

QTY -027	QTY -028	QTY -037	QTY -038	PART NUMBER	DESCRIPTION
X				D412-698-027	BRACKET KIT, LH (ALUMINUM DOORS)
	X			D412-698-028	BRACKET KIT, RH (ALUMINUM DOORS)
		X		D412-698-037	BRACKET KIT, LH (COMPOSITE DOORS)
			X	D412-698-038	BRACKET KIT, RH (COMPOSITE DOORS)
1				D3199-3	FORWARD BRACKET, LH
	1			D3199-4	FORWARD BRACKET, RH
		1		D3675-5	FORWARD BRACKET, LH
			1	D3675-6	FORWARD BRACKET, RH

WEIGHT AND BALANCE

Installation	Weight	Lateral		Longitudinal		Applicability
		Arm	Moment	Arm	Moment	
D412-698-027 Bracket Kit	0.16 lb 0.07 kg	-48.0 in -1.22 m	-7.68 in-lb -0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	Aircraft Equipped with P/N 205-032-669-XXX Aluminum Doors
D412-698-028 Bracket Kit	0.16 lbs 0.07 kg	+48.0 +1.22 m	+7.68 in-lb +0.09 m-kg	102.3 in 2.60 m	16.37 in-lb 0.18 m-kg	
D412-698-037 Bracket Kit	0.18 lb 0.08 kg	-48.0 in -1.22 m	-8.64 in-lb -0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	Aircraft Equipped with P/N 412-030-300-XXX Composite Doors
D412-698-038 Bracket Kit	0.18 lb 0.08 kg	+48.0 in +1.22 m	+8.64 in-lb +0.10 m-kg	102.3 in 2.60 m	18.41 in-lb 0.21 m-kg	

CANADA
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DATE: 11.03.21
CERT. NO.: SH92-43
ISSUE NO.: 5

C	UPDATED -027/-028/-037/-038 KITS AND INSTALLATION	MB	11.03.21
B	ADDED -037/-038 KIT FOR COMPOSITE DOORS; UPDATED TITLE ACCORDINGLY.	MB	10.12.17
A	NEW ISSUE	<i>[Signature]</i>	09.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.	NA	DSI 9484	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	D412-698-027/-028/-037/-038 Kits	NTS
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